

IN THE CLAIMS

1. - 26. (Cancelled)

27. (Original) A method comprising:

forming a via in a substrate; and

forming at least a portion of an electrical component in the via in the substrate.

28. (Original) The method of claim 27 wherein forming at least a portion of an electrical component in the via includes forming a resistor.

29. (Original) The method of claim 27 wherein forming at least a portion of an electrical component in the via includes forming a capacitor.

30. (Original) The method of claim 27 wherein forming at least a portion of an electrical component in the via includes forming a core.

31. (Original) The method of claim 27 wherein forming at least a portion of an electrical component in the via includes forming at least a portion of a transformer.

32. (Previously Presented) A method comprising:

forming a via in a substrate; and

forming an electrical component in the via in the substrate.

33. (Previously Presented) The method of claim 32 wherein forming an electrical component in the via includes forming at least a portion of a resistor.
34. (Previously Presented) The method of claim 32 wherein forming an electrical component in the via includes forming at least a portion of a capacitor.
35. (Previously Presented) The method of claim 32 wherein forming an electrical component in the via includes forming at least a portion of a core.
36. (Previously Presented) The method of claim 32 wherein forming an electrical component in the via includes forming a resistor.
37. (Previously Presented) The method of claim 32 wherein forming an electrical component in the via includes forming a core.
38. (Previously Presented) The method of claim 32 wherein forming an electrical component in the via includes forming at least a portion of a memory device.
39. (Previously Presented) The method of claim 32 wherein forming an electrical component in the via includes forming a memory device.
40. (Previously Presented) The method of claim 32 wherein the electrical component in the via includes a passive electrical component.
41. (Previously Presented) The method of claim 32 wherein the electrical component in the via is a passive electrical component.

42. (Previously Presented) The method of claim 32 wherein the electrical component is a capacitor further comprising:

an inner cylindrical portion; and

an outer via portion substantially surrounding the inner cylindrical portion.

43. (Previously Presented) The method of claim 32 wherein the electrical component is a capacitor further comprising:

a first curved portion; and

a second curved portion spaced from the first curved portion, wherein the distance between the first curved portion and the second curved portion vary.

44. (Previously Presented) The method of claim 32 wherein the electrical component is a capacitor further comprising:

a first curved portion; and

a second curved portion spaced from the first curved portion, wherein the first curved portion and the second curved portion are portions of a via formed by insulating a first portion of a via from a second portion of a via..

45. (Previously Presented) The method of claim 32 wherein forming an electrical component in the via includes forming at least a portion of a transformer.

46. (Previously Presented) A method comprising:

forming via between a first layer of conductive material and a second layer of conductive material;

lining the via with a conductive material;

connecting the lining to a first conductive layer;

forming a conductor through the via;

connecting the conductor to the first conductive layer;
connecting the lining to the second conductive layer; and
insulating the lining in the via from the conductor in the via.

47. (Previously Presented) The method of claim 46 wherein lining the opening with material includes etching the bottom of the opening.

48. (Previously Presented) The method of claim 46 wherein lining the opening with a material includes lining the opening with a magnetizable material.

49. (Previously Presented) The method of claim 15 wherein lining the opening includes lining the opening with conductive material.

50. (Previously Presented) A method comprising:
forming a via;
depositing a first layer of conductive material on inside surface of the via;
removing a portion of the deposited first layer of conductive material;
depositing a dielectric material onto the remaining portion of the conductive material and onto the inner surface of the via;
removing a second portion of the dielectric material; and
depositing a second layer of conductive material.

51. (Previously Presented) The method of claim 50 wherein removing a portion of the deposited first layer includes etching.

52. (Previously Presented) The method of claim 50 wherein removing a portion of the deposited insulative material includes etching.

53. (Previously Presented) The method of claim 50 wherein the amount of dielectric material provides an insulator between the first conductive layer and the second conductive layer.

54. (Previously Presented) A method comprising:

forming a via in a substrate;

depositing a first pad having a portion associated with the via;

depositing a second pad having a portion associated with the via, the first pad electrically isolated from the second pad;

filling the via with a resistive material.

55. (Previously Presented) The method of claim 54 wherein depositing the first pad and depositing the second includes placement proximate a single surface of the substrate.

56. (Previously Presented) The method of claim 54 wherein depositing the first pad includes placement proximate a first surface of the substrate and depositing the second includes placement proximate a second surface of the substrate.

57. (Previously Presented) The method of claim 54 wherein the filling the via with a resistive material includes selecting the resistivity of the material to select the resistance across the via.

58. (Previously Presented) The method of claim 27 wherein forming at least a portion of an electrical component in the via includes:

lining the via with a conductive material;

connecting the lining to a first conductive layer;

forming a conductor through the via;

connecting the conductor to the first conductive layer;

connecting the lining to a second conductive layer; and

insulating the lining in the via from the conductor in the via.

59. (Previously Presented) The method of claim 58 wherein lining the via with material includes etching the bottom of the via.

60. (Previously Presented) The method of claim 58 wherein lining the via with a material includes lining the opening with a magnetizable material.

61. (Previously Presented) The method of claim 27 wherein forming at least a portion of an electrical component in the via includes:

- depositing a first layer of conductive material on inside surface of the via;
- removing a portion of the deposited first layer of conductive material;
- depositing a dielectric material onto the remaining portion of the conductive material and onto the inner surface of the via;
- removing a second portion of the dielectric material; and
- depositing a second layer of conductive material.

62. (Previously Presented) The method of claim 61 wherein removing a portion of the deposited first layer includes etching.

63. (Previously Presented) The method of claim 61 wherein removing a portion of the deposited insulative material includes etching.

64. (Previously Presented) The method of claim 61 wherein the amount of dielectric material provides an insulator between the first conductive layer and the second conductive layer.

65. (Previously Presented) The method of claim 27 wherein forming at least a portion of an electrical component in the via includes:

- depositing a first pad having a portion associated with the via;

depositing a second pad having a portion associated with the via, the first pad electrically isolated from the second pad; and
filling the via with a resistive material.

66. (Previously Presented) The method of claim 65 wherein depositing the first pad and depositing the second includes placement proximate a single surface of the substrate.

67. (Previously Presented) The method of claim 65 wherein depositing the first pad includes placement proximate a first surface of the substrate and depositing the second includes placement proximate a second surface of the substrate.

68. (Previously Presented) The method of claim 65 wherein the filling the via with a resistive material includes selecting the resistivity of the material to select the resistance across the via.